
OL5204N-100-P20

1550 nm/100 mW Laser Diode DIL Module with Single Mode Fiber.

GENERAL DESCRIPTION

OL5204N-100-P20 is a 1550 nm Laser Diode in a DIL package with single mode fiber.

FEATURES

- Single-mode fiber output: $P_f = 100$ mW
pulse width $10\mu\text{s}$, duty 1%
- Thermo-electric cooler
- Multi-quantum-well (MQW) structure

APPLICATIONS

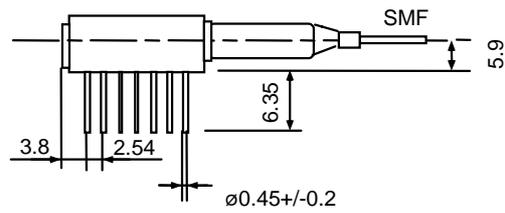
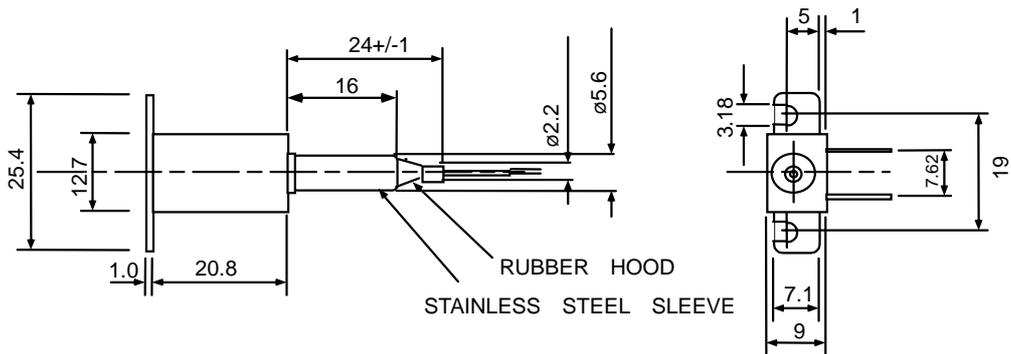
- Optical measuring instruments
- OTDRs

OUTLINE DRAWING

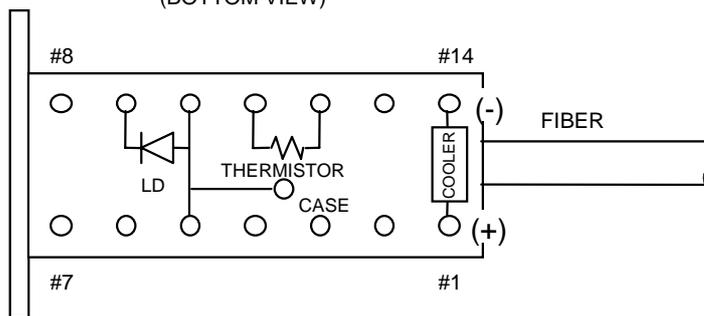
**All dimensions in millimeters
Package No. (Unit: mm)**

Package No.
204

Tolerances Unless Noted +/-0.5



TERMINAL CONNECTION
(BOTTOM VIEW)



ABSOLUTE MAXIMUM RATINGS

(Ta = 25°C, unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Fiber Output Power	Pf	120	mW
Laser Diode Forward Current	If (LD)	800	mA
Laser Diode Reverse Voltage	Vr (LD)	2	V
Cooler Current	Ic	1.0	A
Operating Temperature	Topr	-20 to +65	°C
Storage Temperature	Tstg	-40 to +70	°C

Pulse width less than 10μs, duty less than 1%

Exceeding these ratings may lead to immediate destruction or permanent deterioration of the device.

OPTICAL AND ELECTRICAL CHARACTERISTICS

(TLD = 25°C, Pulse width 10μs, duty 1%)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	Ith	—	—	—	50	mA
Operating Current	Iop	Pf = 100 mW	—	—	800	mA
Operating Voltage	Vop	Pf = 100 mW	—	—	3.0	V
Center Wavelength	λc	Pf = 100 mW	1530	—	1570	nm
RMS Spectral Width	σ	Pf = 100 mW, RMS	—	—	10	nm
Cooler Capacity	ΔT	Pf = 100 mW	40	—	—	°C
Cooler Current	Ic	ΔT = 40°C, Pf = 100 mW	—	—	1.0	A
Cooler Voltage	Vc	ΔT = 40°C, Pf = 100 mW	—	—	2.0	V
Thermistor Resistance	Rth	—	9.0	—	11	kΩ

FIBER PIGTAIL SPECIFICATIONS

Parameter	Specifications	Unit
Type	SM	—
Mode Field Diameter	9+/-1	μm
Cladding Diameter	125+/-2	μm
Jacket Diameter	900	μm
Length	1 (Min.)	m
Connector	FC/SPC	—

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1. The information contained herein can change without notice owing to product and/or technical improvements. Before using the product, please make sure that the information being referred to is up-to-date.
2. The outline of action and examples for application circuits described herein have been chosen as an explanation for the standard action and performance of the product. When planning to use the product, please ensure that the external conditions are reflected in the actual circuit, assembly, and program designs.
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